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(71) Applicant: **NEC CORPORATION**
Tokyo (JP)

(72) Inventor: **Sasaki, Eisaku**
Tokyo (JP)

(74) Representative: **Vossius & Partner**
Siebertstrasse 4
81675 München (DE)

(54) **Method and apparatus for multi-level quadrature amplitude modulation**

(57) It is an object of the present invention to provide a method and an apparatus for multi-level quadrature amplitude modulation system, in which the DC level of the output is "0" even when the modulation multi-level number is varied and mean electric power becomes almost the same, and the multi-level quadrature amplitude modulation system of the present invention is capable of modulating at different modulation multi-level numbers and comprises the steps of converting all of

the input bit numbers into the same bit number based on a prescribed conversion rule for each orthogonal channel irrespective of the modulation multi-level number of the multi-level quadrature amplitude modulation system, filtering the converted signal by means of a digital filter, converting the output of the digital filter into an analog signal by means of a D/A converter, and modulating the analog signal by means of a quadrature modulator.

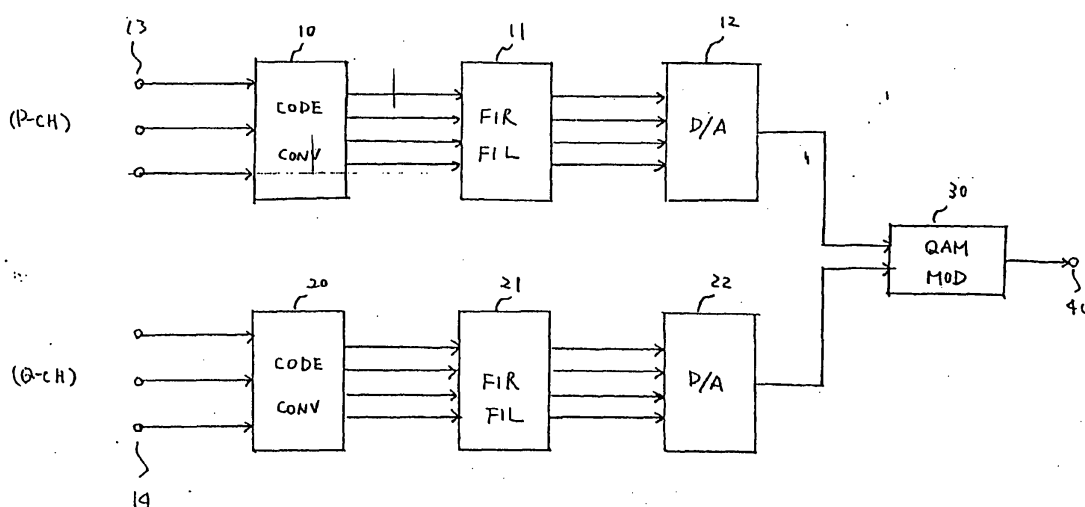


Fig. 4



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Application Number
EP 04 02 5350

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2
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2

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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